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# RTO Formation
# **Balancing Authority/Control Area Operations**
# Avista Corporation

Avista Corporation ("Avista") will have an ongoing interest in the issues surrounding how control areas will be organized following the formation of the Pacific Northwest regional transmission organization (the "RTO WEST"). Avista wants to ensure that neither its native load customers nor its generation function is disadvantaged upon the RTO WEST commencing operation and that no unnecessary or redundant costs are incurred in developing new or consolidated control area facilities. The challenge for the RTO WEST will be to develop a structure which will be equitable for all parties.

Avista has developed an approach, described below, to address how the issues regarding the operation of control areas might be handled during the initial formation stages of the RTO WEST and to address how current control area operations might evolve or migrate to new organizations in the future. Because of other changes occurring in the industry, it would be premature to develop a proposal that addresses in detail all possible end states for the RTO WEST regarding the issue of control area operation. Furthermore, there is a move within NERC to do away with the concept of control areas and replace it with the concept of Balancing Authorities. This proposal attempts to outline how the RTO WEST could be structured to handle control area operations during the initial stages of the RTO WEST and to allow for modification and reallocation of Balancing Authority functions in the future, as appropriate.

Two separate issues need to be addressed with regard to control area operations under the RTO WEST: consolidation of existing control areas, and migration of functions from control areas to the RTO WEST. To a certain extent, these issues may overlap if the RTO WEST ever becomes a control area operator.

## Basic Operational Assumptions

To begin, Avista has developed the following list of basic operational assumptions which can serve as a basis for discussion of control area operations under the RTO WEST.

- The initial operation of the transmission system on the RTO WEST's first day of operation ("Day One") will, by necessity, be substantially identical to the current operation of the transmission system.
- The current control areas will remain operating on Day One.
- The concept of a control area is evolving towards the concept of a Balancing Authority.

- It is probable that eventually the several smaller Balancing Authorities comprised within the RTO WEST will merge into fewer Balancing Authorities in the future.
- The members of the RTO WEST will not establish a single control area unless they find the transition to a single control area to be financially attractive.
- Transmission customers and generation owners will not support the establishment of a single Control Area unless they find the transition to a single control area to be financially attractive.
- The transition from Day One operation to a different scenario is expected to take years rather than months.
- Because important factors that affect the structure of control areas under the RTO WEST may vary significantly in the future, the RTO WEST should adopt an organizational model which allows the flexibility to change and adapt.

Consolidation of Control Areas

Current control areas will remain operating on Day One and will continue to be operated by the same RTO WEST Control Area Members that currently operate them. Over time, individual control area members may determine that consolidation is appropriate. Such consolidation may involve only two or a few control areas or may involve all the remaining control areas. The consolidation process would be iterative and would occur when and if deemed appropriate and cost-effective by the parties involved.

The decision of whether to consolidate control areas would be made by the affected parties based on the factors such as cost, efficiency, system reliability, avoiding unnecessary redundancies, and the facilitation of competitive markets. Consolidation would not be subject to either a specific series of deadlines or a specific set of criteria. Presumably, most control area operators will not choose to consolidate control areas until they determine that consolidation would be financially attractive and in the best interest of their customers. Presumably also, most transmission customers and generation owners will not support consolidation of control areas until they determine that consolidation would be financially attractive. Because numerous factors affect the financial attractiveness of the consolidation determination, and because most of those factors are subject to significant variation over time, it would be inappropriate to establish a rigid schedule for consolidation. It may be advisable, however, to establish a schedule for periodic review of whether consolidation, on either a limited or full basis, would be appropriate.

Migration of Functions

Control area operators are currently responsible for both the adequacy and the security of the system. After its formation, the RTO WEST would become responsible for the security of the system, but the control area operators would remain responsible for the adequacy of the system, at least during the initial stages.

Under the traditional, vertically integrated model, the term "control area operations" is too often expansively used to encompass the provision of ancillary services. However, ancillary services and other transmission-support commodities (e.g., losses, imbalance market, redispatch) can, and Avista believes should, be addressed independently from the issue of control area operations. In accordance with Order No. 888, the responsibility to offer and obtain ancillary services and the procedures for offering and obtaining ancillary services can be established without regard to the balancing functions performed by control area operators. Moreover, separating the issues regarding ancillary services and other transmission-support commodities from the other issues regarding control area operations clarifies and assists the analysis of control area operations under the RTO WEST. Accordingly, Avista has developed a separate white paper presenting a proposal with regard to the provision of ancillary services under the RTO WEST.

As noted above, there is a movement within NERC to evolve towards a Balancing Authority approach to control area operations. Under the Balancing Authority approach, the control area operator becomes responsible for adequacy functions, such as maintaining the area control error signal within the control area, managing load, and dispatching units subject to automatic generation control. The RTO WEST, on the other hand, would become responsible for security functions, such as switching, calculating available transmission capability, reserving and scheduling transmission, and hosting the OASIS.

After the initial stages, it may be appropriate to move some or all of the adequacy functions from the control area operators to the RTO WEST. For example, a partial migration of functions might be achieved by making the RTO WEST the Balancing Authority for the overall system with respect to neighboring systems, but allowing the control area operators to remain as the Balancing Authority for the control areas comprised within the RTO WEST. Under such a scenario, the control areas would effectively become balancing subzones of the the RTO WEST system. A complete migration of functions from the control area operators to the RTO WEST, on the other hand, would effectively make the RTO WEST the single control area operator for the entire system.

As with the issue of consolidation, the issue of migration of functions is affected by numerous factors that could vary significantly in the future. In particular, advances in technology will play a major role in determining how large a control area can become without sacrificing effective, efficient, and reliable operation. Accordingly, it would not be appropriate to establish

a rigid timetable for migration of functions or a rigid set of criteria under which a determination about migration of functions would be made. However, as with the issue of consolidation, it may be appropriate to establish a schedule for periodic review of the issue.